



Rico Argentine Mine Site - UAO Schedule Modification

Steven Way to: Brown, Anthony R (RM)

Cc: Amelia Piggott, "Yadon, Douglas", "Christner, Jan", "Cohen, Adam"

01/11/2012 02:22 PM

From:

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To:

"Brown, Anthony R (RM)" <anthony.brown@bp.com>

Cc:

Amelia Piggott/R8/USEPA/US@EPA, "Yadon, Douglas" <Douglas.Yadon@aecom.com>, "Christner, Jan" <jan.christner@urs.com>, "Cohen, Adam" <Adam.Cohen@dgslaw.com>

## Hello Tony,

Attached is the modified schedule for the Rico Argentine Mine Site - Unilateral Administrative Order for Removal Action ("UAO") Docket No. CERCLA-08-2011-0005, March 23, 2011. Pursuant to the provisions in section XV of the Order, I have approved the work plan schedule changes as shown and extended the delivery and completion dates for several tasks based on the plans to perform certain tasks this year as outlined in my letter. These changes are shown in the attached Section 8 - Schedule table.

If you have any questions, please contact me. I look forward to meeting with you regarding the next phase of work.

Sincerely,

Steve

POF

POF

EPAScheduleModLtr-1-2012.pdf Rico - ScheduleMod1-10-12.pdf

On-Scene Coordinator
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Ref: 8EPR-SA

January 10, 2012

Mr. Anthony Brown
Atlantic Richlield Company
4 Centerpointe Drive
Project Manager, Mining La Palma, CA 90623-1066

Re: Rico Argentine Mine Site – Unitateral Administrative Order for Removal Action ("UAO")

Docket No. CERCLA-08-2011-0005 – Schedule Modification

Dear Mr. Brown:

I am writing you to follow up with written conilrmation of previously approved schedule modifications that Atlantic Richfield has requested. In addition, this letter addresses anticipated 2012 season work and the proposed schedule modifications discussed during our meeting on December 1, 2011.

Specifically, the October written request to extend the deliverable dates for Task F1 — Preliminary Water Treatment Technology Screening Report to November 30 and Task C1 — Repository Design and Operating Plan to December 31, 2011 are approved. Also in your October 4, 2011 letter you indicate that Task B3 — Pond Stability Analysis field work was scheduled to be completed in 2011, and the findings that were provided in a Technical Memorandum on December 31<sup>st</sup>. These proposed schedule changes are acceptable. The results of these investigations are intended to be used In the plans developed for the Embankment Armoring and the Pond Stability Upgrades, which are scheduled to be completed in 2012.

As EPA and Atlantic Richfield discussed on December 1 and presented in the December 16, 2011 letter from Atlantic Richfield, EPA has considered the request for an extension of the scheduled deliverable and work completion dates associated with the planned water treatment design and construction. The extensions being approved are shown in the attached modified schedule. Proposed modifications to the schedule will allow time in 2012 to perform temporary flow control and treatment critical to quantifying the contaminant loading from the Blaine Adit level and determine if management of the smaller but higher concentration tlow is feasible and may provide more long-term effectiveness. The primary reasons for granting the extension are based on the 2011 investigation of the acid mine drainage sources and underground workings associated with the Blaine Adit level and Argentine Shaft and the geotechnical investigation findings. The opportunity exists in 2012 to temporarily isolate, quantify and treat specific sources of acid mine drainage traveling underground through workings reporting to the St Louis

Tunnel discharge. In addition, controlling this flow is necessary to perforin limited underground structural repair to the mine workings and to restore the underground flow path to the St. Louis Tunnel.

The above work will in turn assist with determining where it is most feasible to direct flows and which treatment alternatives are feasible for managing the ongoing releases from St. Louis Tunnel and associated mine workings. Following the above work to be completed in 2012, it is expected that the information will be available to determine if an alternative to a solely St. Louis Tunnel/Ponds lime addition water treatment system is feasible.

In addition, based on geotechnical evaluation of the potential water treatment solids repository locations, it was determined that additional locations need to be evaluated that may provide more stable conditions for long-term storage. Also, the modified dates for constructing the final solids repository are consistent with the modified schedule for water treatment operations.

While this schedule extension does not approve all of the dates requested by Atlantic Richfield, the modifications provided are appropriate based on the current conditions. The enclosed schedule (Section 8 of the Order) oudines the specific modifications to the schedule and tasks details that must be performed to meet the objectives associated with these changes.

Sincercty.

Steven Way

On-Scene Coordinator

Enclosure

cc: Amelia Piggott, 8ENF-L

## Rico Argentine Mine Site – Unilateral Administrative Order for Removal Action ("UAO") Docket No. CERCLA-08-2011-0005 – Schedule Modification

	Section 8.0 - Schedule (modified 1/10/12)	Submittal Due or Work to be Completed (or Started as Noted)
Task	A - Pre-Design And Ongoing Site Monitoring	
Al	Ongoing Water Quality and Flow Monitoring	
	Flow monitor installation	Completed
	Quarterly downloads	Ongoing
A2	Seasonal Water Quality and Flow Monitoring	Ongoing
	SAP/QAPP	Completed
	First sampling event	Completed
Task	B - Management of Precipitation Solids in the Upper	
	ing Ponds	
Bl	Develop Initial Solids Removal Plan	Completed
B2	Drying Bed Construction, Solids Removal, and Solids	
	Management	
	Mobilization and site preparation	Completed
	Pond 18 solids removal	Completed
	Downstream ponds solids removal	_
	Start	July 2012
	Complete	November 2013
	Temporary repository – Construction complete	October 2012
	Interim ponds solids management	October 31, 2014
	Permanent drying facility design	January 31, 2014
	Pennanent drying facility construction	November 30, 2015
В3	Pond Stability Analysis and Upgrades	
	Pond stability analysis (Geotechnical and Hydrology)	December 30, 2011
	Embankment armoring	June 1, 2012
	Stability upgrades – structural	See Task F
Task	C - Design and Construction of a Solids Repository	
CI	Develop a Repository Design and Operating Plan	
	Site selection complete	September 2012
	Submit Repository Design and Operating Plan	April 2013
	Permitting (not required; anticipated timing)	January 31, 2014
C2	Solids Repository Construction and Initial Solids	
	Placement	November 30, 2014
	Mobilization	May 5, 2014
	Construct repository	September 30, 2014
	Placement of dried Pond 18 solids	October 31, 2014
	Placement of downstream ponds solids	October 31, 2014
	D-Hydraulic Control Measures for the Collapsed area	
of St	Louis Tunnel Adit	
DI	Adit Collapse Area Investigations Plan	Complete
	Adit and Portal Investigation Report	December 30, 2011
	Additional Investigation	September 2012
	Preliminary Design Report	January 31, 2013

D3	Final Design and Construction of Adit Hydraulic Controls		
<i>D</i> 3	Final design	January 31, 2014	
	Construction	November 28, 2014	
Tack	E – Source Water Investigations and Controls (Assumes	1101011001 20, 2011	
Blaine/Argentine Treatment)			
EI	Review Existing Data	Ongoing	
E2	Additional Investigations	October 31, 2012	
	Blaine water diversion	001001 31, 2012	
	Argentine Shaft flow/pump test (TBD)		
ļ	Pilot scale, temporary water treatment		
E3	Evaluation of Hydraulic Controls Alternatives	January 31, 2013	
E4	Mine Water Source Controls - Design and Construction		
-	(Pending E3 Findings)		
	Preliminary design and Additional Data Collection	August 30, 2013	
	Final design	March 2014	
	Construction		
	Start	June 2014	
1	Complete and Operational	June 2015	
TREATMENT ALTERNATIVES DECISION POINT		February 2013	
Task	F – Water Treatment System Analysis and Design		
	(Assumes St. Louis Tunnel/Ponds based system)		
Fl	Preliminary Water Treatment Technology Alternatives	Received	
	Screening Report		
F2	Treatment System Conceptual Designs and Additional		
	Investigations	_	
	Additional investigations/pilot scale testing	June – October 2012	
	Conceptual design	March 2013	
F3	30-Percent Design Report	July 2013	
F4	Final Design and Construction of the Water Treatment		
	Facility	N 1 2012	
	Final Design	November 2013	
	Construction and initial operation – Treatment Facility		
	Start	June 2014	
	Complete	November 30, 2014	
	Final design and construction of the flood dike and pond		
	embankments improvements	Juna 20 2012	
	Final design Construction	June 28, 2013	
	Start	August 2013	
		November 30, 2014	
	Complete	14076111061 30, 2014	